

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/03/03

Date Received: 03/27/03

Project: Metro Self Monitor Grab, PO# M69711, F&BI 303255

Date Extracted: 04/02/03

Date Analyzed: 04/02/03

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M69711 303255-01	0.17	0.15	0.17	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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**QUALITY ASSURANCE RESULTS  
FROM TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 303196-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.74	0.76	3	0-20
Copper	mg/L (ppm)	0.57	0.57	0	0-20
Nickel	mg/L (ppm)	0.46	0.47	2	0-20
Zinc	mg/L (ppm)	0.07	<0.05	nm	0-20

Laboratory Code: 303196-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	2	0.74	90	80-120
Copper	mg/L (ppm)	2	0.57	95	80-120
Nickel	mg/L (ppm)	4	0.46	87	80-120
Zinc	mg/L (ppm)	2	0.07	85	80-120

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	93	91	80-120	2
Copper	mg/L (ppm)	2	94	92	80-120	2
Nickel	mg/L (ppm)	4	92	92	80-120	0
Zinc	mg/L (ppm)	2	96	93	80-120	3

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

April 3, 2003

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

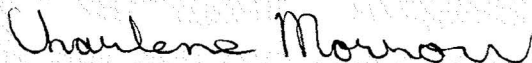
Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 27, 2003 from the Metro Self Monitor Grab, PO# M69711, F&BI 303255 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Charlene Morrow  
Chemist

Enclosures  
ACU0403R.DOC



**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

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e-mail: fbi@isomedia.com

April 3, 2003

**DUPLICATE COPY**

**INVOICE # 03ACU0403-1**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor Grab, PO# M69711, F&BI 303255 - Results of testing requested by Gerry Thompson for material submitted on March 27, 2003.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc  
by Method 6010B @ \$80 per sample

\$ 80.00

Amount Due .....

\$ 80.00

FEDERAL TAX ID #(b) (6)

303255

## SAMPLE CHAIN OF CUSTODY

CM 03/27/03 AI<sub>1</sub>

Send Report To

G. Thompson

Company

ALASKAN Copper Works

Address

628 S. Harvard St

City, State, ZIP

Seattle WA 98114

Phone #

206-382-8879

Fax #

206-382-4109

SAMPLER'S (signature)

PROJECT NAME/NO.

MERO SEEL Monitor  
Grab

PO #

M69711

REMARKS

Page # \_\_\_\_\_ of \_\_\_\_\_

## TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by: \_\_\_\_\_

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes			
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS								
M69711	01	3/27/03	1230	H2O	1								See M69711, 20						

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

G. Thompson

Tara E. Debraff

COMPANY

Aew

F&amp;BI

DATE

3/27/03 12:52

03/27/03 1:00

TIME